Digi Connect® Wi-SP

The Wi-SP is built on leading NetSilicon® 32-bit NET+ARM technology. This wireless device server delivers a true plug-and-play device networking solution that combines the benefit of secure wireless networking technology with proven serial port connectivity. It is the ideal choice in retail, warehouse, healthcare and medical applications, allowing you to respond immediately to the ever-changing requirements and challenges.

Features:
• 32-bit NET+ARM high-performance RISC processor (NS7520 55MHz) • 4MB Flash and 16MB RAM integrated • Switch-selectable RS-232/422/485 interface (DB-9M): Throughput up to 230,400 bps; 7, 8 data bits; 1, 1.5, 2 stop bits; None/even/odd parity; Full signal support with software/hardware flow control • 802.11b wireless LAN interface; Infrastructure (BSS) and Ad-Hoc Mode (IBSS) • Flexible 9-30VDC power supply

Description	Digi-Key Part No.	Price Each	Digi-International Part No.
2.4GHz Wireless Device Server Adapter	602-1032-ND◆	369.00	DC-WSP-01-S
Adapter Development Kit (No Raven Debugger)	602-1017-ND	895.00	DC-WSP-01-GN-NR

◆ ***RoHS Compliant***

Digi Connect® Wi-ME

The Digi Connect Wi-ME is a fully customizable and secure 802.11b wireless embedded module and makes fully transparent 802.11b integration possible without the traditional complexities of hardware and software integration work.

Features:

• 32-bit NET+ARM high-performance RISC processor (NS7520 @ 55MHz) • Radio pre-certified in North America, EU and Japan • 2 high-speed TTL serial interfaces • On-board memory 4MB Flash and 8MB RAM • WPA/WPA2/802.11i • Transmit power: 16dBm typical • Receive sensitivity: -82dBm @ 11Mbps • Five shared General Purpose Input/Output (GPIO) ports • High-speed TTL serial interface • 3.3VDC @ 400mA max (1.32W)

Description	Digi-Key Part No.	Price Each	Digi-International Part No.
8MB SDRAM, 4MB Flash, Std. Firmware	602-1037-ND◆	130.00	DC-WME-01T-S
8MB SDRAM, 4MB Flash, Customizable	602-1038-ND◆	130.00	DC-WME-01T-C
Integration Kit (for use with "S" models)	602-1051-ND◆	299.00	DC-WME-01T-KT
Development Kit (for use with "C" models)	602-1000-ND◆	1495.00	DC-WME-01T-GN
Development Kit without Raven Debugger (for use with "C" models)	602-1001-ND	895.00	DC-WME-01T-GN-NR
Customizable with JTAG Interface	602-1002-ND	249.00	DC-WME-01T-JT

◆ ***RoHS Compliant***

Digi Connect® Wi-EM

The Digi Connect Wi-EM is a fully customizable and secure 802.11b wireless embedded module that provides integration flexibility in a variety of connection options, and makes fully transparent 802.11b integration possible without the traditional complexities of hardware and software integration work.

Features:

• 32-bit NET+ARM high-performance RISC processor (NS7520 @ 55 MHz) • 2 high-speed TTL serial interfaces • Radio pre-certified in North America, EU and Japan • On-board memory 4MB Flash and 8MB RAM • WPA/WPA2/802.11i • Transmit power: 16dBm typical • Receive sensitivity: -82dBm @ 11Mbps • Five shared General Purpose Input/Output (GPIO) ports • High-speed TTL serial interface • 3.3VDC @ 400mA max (1.32W)

Description	Digi-Key Part No.	Price Each	Digi-International Part No.
8MB SDRAM, 4MB Flash, Std. Firmware without antenna	602-1067-ND◆	140.00	DC-WEM-02T-NC
8MB SDRAM, 4MB Flash, Std. Firmware	602-1041-ND◆	140.00	DC-WEM-02T-S
Integration Kit (for use with "S" models)	602-1008-ND◆	299.00	DC-WEM-02T-KT
Development Kit (for use with "C" models)	602-1009-ND	1495.00	DC-WEM-02T-GN
Development Kit without Raven Debugger (for use with "C" models)	602-1010-ND	895.00	DC-WEM-02T-GN-NR
Development Board with Customizable JTAG Wi-ME module	602-1011-ND	299.00	DC-WEM-02T-JT-DB
Customizable module with JTAG Interface	602-1012-ND◆	249.00	DC-WEM-02T-JT

◆ ***RoHS Compliant***

ConnectCore™ Wi-9C

Highly-integrated, compact DIMM form factor module based on the 155MHz NS9360 ARM9 processor provides core processing functionality with integrated network connectivity. It enables original equipment manufacturers to design in main processor functionality and networking capabilities with a single, high performance solution.

Features: • 32-bit NS9360 high performance RISC processor (155MHz) with MMU • Up to 4 high-speed TTL serial ports • Up to 4 SPI ports • I^2C v1.0 bus interface • USB 2.0 Host/Device Interface • LCD Controller • General Purpose Timers/Counters/PWM • 4 programmable external interrupts • Up to 55 shared General Purpose Input/Output (GPIO) ports • Real-time clock • Pin-compatible wired and wireless modules • Standard: IEEE 802.11b/g • Transmit power: 16dBm typical • Receive sensitivity: -73dBm at 54Mbps • Connector: 1/2 x RP-SMA or 2 x U.FL

Description	Digi-Key Part No.	Price Each	Digi-International Part No.
JumpStart Kit for Wi-9C with NET+OS	602-1068-ND	499.00	CC-W9C-NET
JumpStart Kit for Wi-9C with Windows CE	602-1077-ND	499.00	CC-W9C-CE6
JumpStart Kit for Wi-9C with Embedded Linux	602-1078-ND	499.00	CC-W9C-LX

Antennas for Digi Wireless Modules

Description	Digi-Key Part No.	Price Each	Digi-International Part No.
2.4GHz Dipole Antenna with 2dBi Gain	602-1064-ND◆	10.00	DC-ANT-24DP
2.4GHz Desktop Antenna with 2dBi Gain	602-1065-ND	20.00	DC-ANT-24DT
30cm Extension Cord with RP-SMA Bulkhead Connector	602-1066-ND◆	12.00	DC-ANT-E-24DP

◆ ***RoHS Compliant***

802.11b/g Modules and Kits

AirborneDirect™: Bridge Modules come with either Ethernet, Serial (RS232/422/485) or RS232 connections, to a wireless LAN interface utilizing an 802.11b radio. Used to easily integrate wireless into a design. Includes antenna. **Airborne™ Embedded Modules:** Versions include LAN mode module, module with Integrated Ethernet Bridge software or a module with Integrated Serial Bridge software. U.FL Connector on board.

Description	Connection Type	Digi-Key Part No.	Price Each 1	10	25	DPAC/Quatech Part No.
AirborneDirect™ Modules/Kits						
Wireless Device Server 802.11b with Antenna	Ethernet	590-1000-ND	192.16	168.14	162.14	ABDB-ET-DP101
Wireless Device Server 802.11b with Antenna	Ethernet	590-1023-ND◆	192.16	168.14	162.14	ABDB-ET-DP101-G
Wireless Device Server 802.11b with Antenna	Serial (RS232/422/485)	590-1001-ND	202.80	177.45	171.12	ABDB-SE-DP101
Wireless Device Server 802.11b with Antenna	Serial (RS232/422/485)	590-1024-ND◆	202.80	177.45	171.12	ABDB-SE-DP101-G
Wireless Device Server 802.11b with Antenna	RS232	590-1002-ND	192.16	168.14	162.14	ABDB-SE-DP107
Wireless Device Server 802.11b with Antenna	RS232	590-1025-ND◆	192.16	168.14	162.14	ABDB-SE-DP107-G
Wireless Device Server 802.11b/g with Antenna	RS232/422/485	590-1018-ND◆	206.60	177.45	171.12	ABDG-SE-DP101-G
Wireless Device Server 802.11b/g with Antenna	RS232/422/482	590-1038-ND◆ ***NEW!***	278.40	243.60	230.55	ABDG-SE-DP103
Wireless Device Server 802.11b/g with Antenna	RS232	590-1019-ND◆	195.76	168.14	162.14	ABDG-SE-DP104-G
Wireless Device Server 802.11b/g with Antenna	RS232	590-1039-ND◆ ***NEW!***	263.68	230.72	218.36	ABDG-SE-DP106
Wireless Device Server 802.11b/g Serial Powered with Antenna	RS232	590-1020-ND◆	195.76	168.14	162.14	ABDG-SE-DP107-G
Wireless Ethernet Bridge 802.11b/g	Ethernet	590-1021-ND◆	195.76	168.14	162.14	ABDG-ET-DP101-G
Airborne™ Embedded Modules/Kit						
802-11b Module with U.FL Antenna Port	Serial	590-1032-ND◆	109.06	93.02	89.81	WLNB-AN-DP101-G
802.11b Module Integrated Ethernet Bridge Software with U.FL Antenna Port	Ethernet	590-1012-ND	109.06	93.02	89.81	WLNB-ET-DP101
802-11b Module Integrated Ethernet Bridge Software with U.FL Antenna Port	Ethernet	590-1034-ND◆	109.06	93.02	89.81	WLNB-ET-DP101-G
802.11b Module Integrated Serial Bridge Software with U.FL Antenna Port	Serial (RS232/422/485)	590-1013-ND	109.06	93.02	89.81	WLNB-SE-DP101
802.11b Module Integrated Serial Bridge Software with U.FL Antenna Port	Serial (RS232/422/485)	590-1035-ND◆	109.06	93.02	89.81	WLNB-SE-DP101-G
802.11b/g Module Integrated Serial Bridge Software with U.FL Antenna Port	RS232	590-1015-ND◆	110.98	93.02	89.81	WLNG-AN-DP101-G
802.11b/g Module Integrated Serial Bridge Software with U.FL Antenna Port	Serial (RS232/422/485)	590-1016-ND◆	110.98	93.02	89.81	WLNG-SE-DP101-G
802.11b/g Module Integrated Ethernet Bridge Software with U.FL Antenna Port	Ethernet	590-1017-ND◆	110.98	93.02	89.81	WLNG-ET-DP101-G
Development Kit for Airborne Embedded 802.11b/g Module with Wireless Access Point	Ethernet	590-1037-ND◆ ***NEW!***	255.83	219.73	207.96	ABDG-ET-DP103
Development Kit for Airborne Embedded 802.11b/g Module with Wireless Access Point	Ethernet	590-1036-ND◆	279.00	—	—	ABEG-ET-DP103-G
Development Kit for Airborne Embedded 802.11b/g Module with Wireless Access Point	Serial (RS232/422/485)	590-1040-ND◆ ***NEW!***	486.53	437.88	413.55	WLNG-EK-DP001
Development Kit for Airborne Embedded 802.11b/g Module without Wireless Access Point	Serial	590-1022-ND◆	446.53	—	—	WLNG-EK-DP003-G
Antennas and Accessories						
Adapter Cable, RPSMA (Jack) to U.FL (Plug) 100mm	—	590-1005-ND	14.85	11.22	10.56	ACH0-CA-DP004
Adapter Cable, RPSMA (Jack) to U.FL (Plug) 100mm	—	590-1014-ND◆	11.70	9.00	8.48	ACH0-CA-DP004-G
Antenna, 2dBi, Rubber Duck, RP-SMA	—	590-1006-ND	10.69	8.08	7.60	ACH2-AT-DP002
Antenna, 2dBi, Rubber Duck, RP-SMA	—	590-1028-ND◆	10.69	8.08	7.60	ACH2-AT-DP002-G
Antenna, 5dBi, Rubber Duck, RP-SMA	—	590-1007-ND	12.38	9.52	8.97	ACH2-AT-DP003
Antenna, 5dBi, Rubber Duck, RP-SMA	—	590-1029-ND◆	12.38	9.52	8.97	ACH2-AT-DP003-G
Antenna, 5dBi, Rubber Duck, U.FL (Flying Lead)	—	590-1030-ND◆	13.39	10.12	9.52	ACH2-AT-DP004-G
Antenna, 5dBi, Magnetic Mount, Indoor/Outdoor	—	590-1009-ND	27.00	21.60	20.25	ACH2-AT-DP011
Antenna, 5dBi, Magnetic Mount, Indoor/Outdoor	—	590-1031-ND◆	27.00	21.60	20.25	ACH2-AT-DP011-G

◆ ***RoHS Compliant***

ember ZigBee™ ICs and Development Kits

The **EM250** is a single-chip solution that integrates a 2.4GHz, ZigBee/802.15.4-compliant transceiver with a 16-bit XAP2b microprocessor. It contains integrated Flash and RAM memory and peripherals of use to designers of ZigBee-based applications. The **EM260** integrates a 2.4GHz, IEEE 802.15.4-compliant transceiver with a 16-bit XAP2b processor to run EmberZNet, the Ember ZigBee-compliant network stack. The XAP2b microprocessor is a power-optimized core integrated in the EM260. It contains integrated Flash and RAM memory along with an optimized peripheral set to enhance the operation of the network stack.
The **EM2420** is a true single-chip 2.4GHz IEEE 802.15.4 compliant RF transceiver. It includes a digital direct sequence spread spectrum baseband modem and an effective datarate of 250 kbps.
Features: • RF transceiver with baseband modem, MAC support and networking stack • DSSS baseband modem • RFD and FFD operation • Low current (RX: 19.7mA, TX: 17.4mA) • 2.1~3.6V with integrated voltage regulator, 1.6~2.0V with external voltage regulator.
The **JumpStart™ Developer Kit** contains both hardware and software, enabling customers to quickly launch development projects for embedding low-power low-data rate wireless application into their products.
The **Full Development Kit** includes hardware, networking stack and development and debugging software for building embedded applications. The software package includes a service-aware API that simplifies code development and lets you focus on your embedded applications.

Description	Digi-Key Part No.	Price Each 1	10	100	Ember Part No.
IEEE 802.15.4/ZigBee ICs — RoHS Compliant					
ZigBee Single Chip IC, 48-QFN	636-1000-1-ND§	10.00	9.00	7.98	EM250-RTR
ZigBee Single Chip IC, 48-QFN	636-1000-2-ND‡		14820.00/2,000		EM250-RTR
ZigBee Single Chip IC, 40-QFN	636-1003-ND	9.82	7.86	6.63	EM260-RTY
ZigBee Single Chip IC, 40-QFN	636-1007-1-ND§	9.40	7.52	6.35	EM260-RTR
ZigBee Single Chip IC, 40-QFN	636-1007-2-ND‡		20398.00/3,500		EM260-RTR
ZigBee Single Chip IC, 48-QLP	636-1006-1-ND§	8.00	6.40	5.40	EM2420-RTR
ZigBee Single Chip IC, 48-QLP	636-1006-2-ND‡		19840.00/4,000		EM2420-RT
Development Kits					
JumpStart Kit for EM250	636-1001-ND	2500.00	—	—	EM250-JMP-R
JumpStart Kit for EM260	636-1004-ND	2500.00	—	—	EM260-USART-JMP-R
Full Development Kit for EM250	636-1002-ND	10000.00	—	—	EM250-DEV
Full Development Kit for EM260	636-1005-ND	10000.00	—	—	EM260-DEV
RF Evaluation Kit for EM250	636-1008-ND◆	500.00	—	—	EM250-EK
Tool — RoHS Compliant					
USB FLASH Programming for EM250/EM260	636-1009-ND	72.00	—	—	EM2XX-USB-PROG-R

§ Cut Tape ‡ Tape and Reel ◆ ***RoHS Compliant***

B

OBID i-scan® FEIG ELECTRONICS Readers

ID CPR.02.VP/AB-ATS

ID CPR.02.VP/AB-ATS is not only able to identify ISO 14443, but also type ISO 15693 transponders. It is a multi-tag reader, which means that it is able to identify and to write on transponders of different manufacturers and ISO-types. The reader supports the safety functions of various known 13.56MHz transponders, such as MIFARE or my-d, due to a SAM-card interface for Security Access Modules. So the reader is even suitable for problematic applications such as ticketing and accounting systems. The use of an ISO-host record guarantees a problem free creation of user software as well as the module's unlimited compatibility with all readers of the OBID i-scan family.
Specifications:
• Dimensions (W x H x D): 114mm x 83mm x 48mm • Housing: Plastic ASA, desk top reader • Protection Class: IP 22 • Operating Frequency: 13.56MHz • Power Supply: 12-24VDC • Power Consumption: Maximum 2.6W • Processable Transponders: ISO 14443-A (e.g. MIFARE, MIFARE Ultra Light, my-proximity) ISO 14443-B; ISO 15693 (e.g. I-CODE SLI, my-d vicinity, STM LRI512, Tag-it HF-I) • Processable Safety Features: Integrated SAM-card interface for SAM (e.g. my-d vicinity and my-d proximity) • Antenna: Integrated • Reading Distance: 7cm with ISO 15693-tags, 6cm with ISO 14443-A-tags. Reading distances depend on the used labels; here made statements relate to an inlet size of 76x45mm. In addition, tuning and quality of the antennas have to be taken into consideration. • Interfaces: 1x RS232 with 2.5m connecting cable • Signal Generator: 1 LED (bi-color), 1 Buzzer • Temperature Range: Operating: -20°C ~ 60°C; Storage: -40°C ~ 85°C • EEPROM: 1kB (10,000 writing cycles) • FLASH: Software-Update over interface possible
629-1001-ND (FEIG ELECTRONICS # 0913.017.00.01) **$798.89**

ID ISC.MR101-A, ID ISC.MR101-USB and ID ISC.MR101.M-A

Multi-tag mid range reader for identification of Smart Labels in the fields of application retail, rental services and industry. The mid-range reader ID ISC.MR101-A/-USB/-M-A works with Smart Labels which are based on transponders with an operating frequency of 13.56MHz. Depending on the antenna used, the reader has a maximum reading distance of up to 40cm.
Specifications:
• Anticollision Function • OBID i-scan SMP (Standard Multi-tag Protocol) • Multi-tag Reader (I-CODE, Tag-it, ISO 15693) • Housing: Plastic • Color: Light Grey • Dimensions (L x W x H): 145mm x 85mm x 31mm • Protection Class: IP 30 • Weight: 170g • Power Supply: Variant A: 12-24VDC +/-15% via external power supply; Variant USB: 12V via external power supply • Power Consumption: Approximately 6VA • Operating Frequency: 13.56MHz • Transmitting Power: Approximately 0.8 up to 1W • Modulation Factor: 10% and 100% (via software adjustable) • Antenna connection: 1 x SMA female plug (50Ω) • Reading Distance: Maximum 40cm • Interfaces: RS232/RS485 (switchable) or USB • Signal Generator: 1 LED (multicolored red/green) • Processable Transponders: I-CODE, Tag-it and ISO 15693 • Temperature Range: Operating: -25°C ~ 60°C; Storage: -25°C ~ 85°C • FLASH: 64kByte (software may be updated via interface)
629-1015-ND (FEIG ELECTRONICS # 1638.000.01.00) RS-232/485 ..... **$538.93**
629-1016-ND (FEIG ELECTRONICS # 1638.001.02.01) USB **$582.84**
629-1019-ND (FEIG ELECTRONICS # 1638.005.01.00) Module, RS232/485 ..... **$514.75**

ID ISC.LRMU1000-A-FCC, ID ISC.LRU1000-A0-FCC and ID ISC.LRU1000-A-FCC

The UHF-Long Range Reader Module ID ISC.LRMU1000 identifies UHF transponders within a frequency range from 865 to 928MHz and so can be used in Europe and in North America.
Licensed according to EN and FCC, in each area maximum allowed transmitting power can be realized. Due to the high maximum reading range of up to 5m with a single antenna and up to 10m with a multi-antenna application, the reader is suitable especially for Asset Management and logistical applications especially there, simultaneous identification of several transponders and very high reading ranges are necessary! Connection of up to 4 external antennas enables realization of multi-antenna-applications (integrated Multiplexer), two different interfaces (RS232, RS485) guarantee high flexibility to connect the reader with your individual backup-system.
Specifications:
• Dimensions (W x L x H): 170mm x 320mm x 48mm • Power Supply: 12-24VDC • Power Consumption: Maximum 29VA • Operating Frequency: 869, 525MHz; 865, 6-867, 6MHz (200kHz steps); 902-928MHz (500kHz steps) • Transmitting Power: 100mW-4W (100mW steps); 4W EIRP; 2W ERP (0.5W ERP) • Modulation: 20%-40% and 100% (scalable via Software) • Receiver: Data rates 40-320kbps • Antenna Connectors: 4 x SMA connector (50Ω) • Outputs: 1 Optocoupler: 24VDC/30mA, 1 Relay (1x NO/NC): 24VDC/2A • Inputs: 1 Optocoupler: Maximum 24VDC/20mA • Interfaces: RS232 and RS485 • Temperature Range: Operating: -25°C ~ 55°C (-25°C ~ 70°C); Storage: -25°C ~ 85°C
629-1049-ND (FEIG ELECTRONICS # 2481.001.11.00) FCC Module **$3520.60**
• Housing: Plastic with heatsink • Dimensions (W x L x H): 180mm x 320mm x 110mm • Protection Class: IP 54
629-1045-ND (FEIG ELECTRONICS # 2241.002.12.00) Housed **$4305.56**
629-1046-ND (FEIG ELECTRONICS # 2241.002.11) Housed, Supports EPC Class 0/0+ Protocols **$3915.04**

ID ISC.M02-B

The ID ISC.M02-B works with Smart Labels with an operating frequency of 13.56MHz. The Read/Write PCB has a maximum reading distance of up to 10cm by using the integrated antenna. By using the external antennas, distances of 7cm (antenna size 30x40mm) respectfully 14cm (antenna size 100x100mm) will be reached. The reader is above all suitable for supply chain applications in the fields of retail, industry, logistics etc. It is even suitable for problematic applications such as ticketing and accounting systems due to an attachable security access module. Apart from this, the data/clock interface enables the reader to be used in access control systems. **Specifications:** • Dimensions (L x W x H): 50mm x 50mm x 15mm • Connector Plug: 10-pole pin terminal (spacing = 2.54mm) • Operating Frequency: 13.56MHz • Power Supply: 5VDC +/-5% • RF Transmitting Power: 90mW +/-2dB • Power Consumption: Maximum 1W • Processable Transponders: ISO 15693 transponders such as I-CODE SLI, my-d vicinity, STM LRI512, Tag-it HF-I etc. • Processable Safety Features: Refitting of SAM (Security Access Module) is possible for my-d vicinity • Antenna: Integrated, 48 x 48mm, external 50Ω antennas optional • Reading Distance: 10cm with integrated antenna up to 14cm with external antennas • Interfaces: 1x RS232-TTL, 1x Data/clock interface, (magnet card emulation and Wiegand emulation) • Signal Generator: 2 LED • Temperature Range: Operating: -20°C ~ 70°C; Storage: -40°C ~ 85°C • EEPROM: 1kB (10,000 writing cycles) • FLASH: 64kB (Software update over interface possible)
629-1032-ND (FEIG ELECTRONICS # 1834.000.00.00) **$207.08**

ID ISC.PRH101-B, ID ISC.PRH101-USB and ID ISC.PRH101-A

As every device of the OBID i-scan HF product family, the hand-held reader ID ISC.PRH101-B identifies transponders with an operating frequency of 13.56MHz. The reader has a maximum reading/writing distance of up to 18cm and is suitable especially for mobile use in connection with a PDA or laptop.
PDA or laptop can be used as a mobile host e.g. as data collector.
The reader's own power supply allows RF transmitting power, that enables identification of transponders which are very close together. **Specifications:** • Bluetooth interface (class I-B) • Anti-collision function • OBID i-scan ISO Host Mode • 2 Operation Modes: Scan-Mode/Polling-Mode • Housing: Plastic ABS (closed) • Color: RAL 9002/RAL 7044 • Dimensions (L x W x H): 230mm x 100mm x 80mm • Weight: 320g (without batteries) • Protection Class: IP 30 • Power Consumption: Maximum 2.5W • Operating Frequency: 13.56MHz • Transmitting Power 0.5W +/-2dB • Antenna: Integrated • Interface: Bluetooth (class I)/USB/RS232 • Supported Transponders: ISO 15693 tags, ISO 18000-3 tags, optional: further tag types • Signal Generator: Optical: 1 LED (red/green/blue); Acoustic: Buzzer • Temperature Range: Operating: 0°C ~ 50°C; Storage: -20°C ~ 70°C • Relative Humidity: 95% (non-condensing)
629-1010-ND (FEIG ELECTRONICS # 1524.000.01.00) RS-232 ..... **$483.27**
629-1011-ND (FEIG ELECTRONICS # 1524.001.01.00) USB **$518.42**
629-1013-ND (FEIG ELECTRONICS # 1524.004.00.00) Bluetooth **$790.80**

ID ISC.PR101-A, ID ISC.PR101-USB and ID ISC.PR101.M-A

The proximity reader ID ISC.PR101-A/-USB/-M-A works with Smart Labels which are based on transponders with an operating frequency of 13.56MHz. The reader has an integrated antenna with a maximum reading distance of up to 18cm. Due to its compact dimensions, the reader is suitable for desk-applications. The reader's anticollision function facilitates simultaneous identification of several objects even when these are wrapped. **Specifications:** • Housing: Plastic • Color: RAL 9018, light grey • Dimensions (L x W x H): 145mm x 85mm x 31mm • Protection Class: IP 30 • Weight: 200g • Power Supply: Variant-A (RS232/RS485): 12-24VDC +/-15% via external power supply; Variant-USB: via USB interface • Power Consumption: Maximum 5VA • Operating Frequency: 13.56MHz • Transmitting Power 0.5W • Modulation Factor: 10% and 100% (via software adjustable) • Antenna: Integrated • Reading Distance: Maximum 18cm • Interfaces: RS232/RS485 (switchable) or USB • Signal Generator: 1 LED multicolored, red/green • Processable Transponders: ISO-tags 15693 (e.g. I-CODE, Tag-it, my-d, STM etc.) • Temperature Range: Operating: -25°C ~ 60°C; Storage: -25°C ~ 70°C • FLASH: 64kByte (software may be updated via interface)
629-1017-ND (FEIG ELECTRONICS # 1638.002.01.00) RS-232 ..... **$527.23**
629-1018-ND (FEIG ELECTRONICS # 1638.003.02.01) USB **$571.00**
629-1020-ND (FEIG ELECTRONICS # 1638.007.01.00) Module **$497.91**

ID CPR.M02-VP/AB-B, ID CPR.M02-VP/AB-BA and ID CPR.M02-VP/AB-CA

The multi tag reader with anti-collision function, which means that it is able to identify transponders of different manufacturers and ISO types at the same time. The reader supports the safety functions of various known 13.56MHz transponders, such as MIFARE or my-d, due to an attachable Security Access Module which makes it even suitable for problematic applications such as ticketing and accounting systems. Apart from this, the data/clock interface enables the reader to be used in access control systems. **Specifications:** • Dimensions (W x H x D): 50mm x 50mm x 14mm • Connector Plug: 10-pole pin terminal (spacing = 2.54mm) • Operating Frequency: 13.56MHz • Power Supply: 5VDC +/-5% • RF-Transmitting Power: 250mW +/-2dB • Power Consumption: Maximum 1.5W • Processable Transponders: ISO 14443-A (e.g. MIFARE, MIFARE Ultra Light, my-proximity) ISO 14443-B • ISO 15693 (e.g. I-CODE SLI, my-d vicinity, STM LRI512, Tag-it HF-I) • Processable Security Features: Refitting of SAM (Security Access Module) is possible for e.g. my-d vicinity and my-d proximity • Antenna: Integrated, 48mm x 48mm • Reading Distance: 10cm with ISO 15693-tags, 4cm with ISO 14443-tags • Interfaces: 1x RS232-TTL, 1x Data/clock-interface (Magnet card emulation and Wiegand emulation) • Signal Generator: 2 LED • Temperature Range: Operating: -20°C ~ 70°C; Storage: -40°C ~ 85°C • EEPROM: 1kB (10,000 writing cycles) • FLASH: 64kB (Software-Update over interface possible)
629-1034-ND (FEIG ELECTRONICS # 1916.000.00.00) On-Board Antenna **$201.14**
629-1057-ND ***NEW!*** (FEIG ELECTRONICS # 2873.000.00.00) Module **$212.95**

(Continued)

ID ISC.MR200-A and ID ISC.MR200-E

The reader ID ISC.MR200-A/-E is offered in an aluminium housing with the protection class IP 54; for this reason it is protected against dust, dirt and syringe water and can be used therefore in the industrial background. Transmitting power of up to 1.7 watt enables reading ranges of up to 70cm. The reader has several I/O's as well as a so-called antenna diagnosis function that indicates whether an antenna is not adjusted as required.

Specifications:

• Housing: Aluminium • Color: RAL 7040 • Dimensions (L x W x H): 200mm x 110mm x 60mm • Protection Class: IP 54 • Power Supply: 12-24VDC • Power Consumption: Maximum 12VA • Operating Frequency: 13.56MHz • Transmitting Power: 1.7W • Antenna Connection: SMA plug (50Ω) • Outputs: 2 Optocouplers: 24VDC/30mA; 1 Relay; 24VDC/2A • Inputs: 2 Optocouplers: Maximum 24VDC/20mA • Interfaces: Version -A: RS232 and RS485 (adjustable); Version -E: Ethernet 10Base-T or 100Base-TX • Operation Modes: FEIG ISO Host Protocol • Processable Transponders: ISO 15693, EPC • Address Control for Interface: Software (up to 254 addresses, only RS485) • Signal Generator: 5 LED • Temperature Range: Operating: -20°C ~ 60°C; Storage: -25°C ~ 85°C

629-1041-ND (FEIG ELECTRONICS # 2060.000.00.01) A Version, RS-232/485..... **$2045.52**

629-1043-ND (FEIG ELECTRONICS # 2221.000.00.01) E Version, Ethernet..... **$2489.33**

ID ISC.MR200-WLAN

RoHS COMPLIANT

ID ISC.MR200-WLAN is offered in a solid plastic housing with the protection class IP 54; for this reason it is protected against dust, dirt and splash water and can be used therefore out of doors. Transmitting power of up to 1.75 watt enables reading ranges of up to 70cm. The reader has several I/O's as well as so-called antenna diagnosis function that indicates whether an antenna is not adjusted as required. The reader has a RS232 and WLAN interface.

Specifications:

• Housing: ABS plastic with lockable hinged cover • Color: Light grey RAL 7035 • Dimensions (L x W x H): 20 x 110 x 60mm • Weight: 450g • Protection Class: IP 54 • Power Supply: 12 ~ 24VDC ±5% • Power Consumption: Maximum 13VA • Operating Frequency: 13.56MHz • Transmitting Power: 1W/1.75W • Antenna Connection: SMA socket (50Ω) • Outputs: 2 Optocoupler - 24VDC/30mA (galvanically isolated), and 1 Relay - 24VDC/2A • Inputs: 2 optocouplers - Maximum 24VDC/20mA • Interfaces: RS232 and WLAN (802.11b) • Operation Modes: ISO Host Protocol, Buffered Read Mode (BRM), Scan Mode • Supported transponders: ISO 15693 and ISO 18000-3, EPC (optional) • FLASH: Software Update via interface possible • Signal Generator: 5 LED • Temperature Range: Operation: -20°C ~ 60°C, Storage: -25°C ~ 85°C • Vibration: EN60068-2-6 10Hz ~ 150Hz; 0.075mm/1g • Shock: EN60068-2-27 Acceleration: 30g • RF Approval: Europe: EN300 330, USA: FCC 47 CFR Part 15 • EMC: EN 301 489 • Safety: Low Voltage: EN 60950, Human Exposure: EN 50364

629-1054-ND (FEIG ELECTRONICS # 2633.000.00) MR Wireless Reader..... **$3024.68**

ID ISC.LRM2000-A, ID ISC.LRM2000-B and ID ISC.LR2000-A

RoHS COMPLIANT

The ID ISC.LR2000 Long Range Reader and the ID ISC.LRM2000 Long Range Reader Unit are the top of the line Long Range Reader versions of the OBID i-scan HF product line.

The ID ISC.LR2000 and ID ISC.LRM2000 are the most powerful reader in the OBID i-scan HF product line. Both devices have identical RF performance. The ID ISC.LRM2000 differs from the ID ISC.LR2000 in terms of housing, interface options and functionality for the host connectivity of the device.

Features:

• Highly sensitivity receiver increased the tag detection range so that the most transponders can be read over the entire power up, field strength area. • RF front end accommodates arbitrary cable lengths between the reader and the antenna without adversely affecting the read range of the antenna. • RF front end has its own power control to protect the read range from external noise sources. • The reader delivers a DC voltage on the antenna output to source DC powered devices connected to the antenna cable, such as the OBID i-scan Dynamic Antenna Tuning board (ID ISC.ANT.DAT-A). • RF source of the reader meets different national radio rules and can achieve the 60dbµA/m ETSI limits.

The reader is able to directly control antenna multiplexing functions. The RF section of the reader is controlled by a dedicated DSP based, RF controller. A second microcontroller, the Application and Connectivity Controller (ACC), uses an ARM processor running a µcLinux operating system. The reader has four hardware interface ports: Ethernet, RS232, RS485, and a Compact Flash 2 compatible port to support a WLAN Card. All ports are under control of the ACC. In combination, the powerful and flexible RF transmitter and receiver and intelligent digital controller form the basis of an agile, multi protocol reader that can be updated as future protocols and features are created.

Specifications for LRM2000:

• Dimensions (W x H x D): 120mm x 160mm x 45mm • Weight: 0.6kg • Power Supply: 24VDC ±15% • Power Consumption: Maximum 32VA • Operating Frequency: 13.56MHz • Transmitting Power: 4 to 12W • Antenna Connection: 1 x SMA connector (50Ω) • DC Power on RF Line: 8VDC Maximum 150mA • RF Diagnostics: Internal SWR Meter internal overheating control • Outputs: 1 Optocoupler: 24VDC/30mA; 1 Differential Output: Reader synchronisation; 1 Relay (1x NO/NC): 24VDC/2A • Inputs: 1 Optocoupler: Maximum 24VDC/20mA; 1 Differential Input: Reader synchronisation • Interface: RS-232 and RS-485 • Supported Transponder: I-Code1, ISO15693, 18000-3-A, (e.g. I-Code SLI, my-d, STM LRI512/64, Tag-it HFI) • Indicators: 5 LED for diagnosis of the operation status • Temperature Range: Operating: -20°C ~ 55°C; Storage: -25°C ~ 85°C

Specifications for LR2000:

• Casing: Plastic • Dimensions (W x H x D): 180mm x 320mm x 110mm • Weight: 1.9kg • Protective System: IP 54 • Color: Black • Power Supply: 24VDC ±15% • Power Consumption: Maximum 32VA • Operating Frequency: 13.56MHz • Transmitting Power: 4 to 12W • Antenna Connection: 1x SMA connector (50Ω) • DC Power on RF Line: 8VDC Maximum 150mA • RF Diagnostics: Internal SWR Meter internal overheating control • Outputs: 1 Optocoupler: 24VDC/30mA; 1 Differential Output: Reader synchronisation; 1 Relay (1x NO/NC): 24VDC/2A • Inputs: 1 Optocoupler: Maximum 24VDC/20mA; 1 Differential Input: Reader synchronisation • Interface: RS-232 and RS-485, Ethernet (TCP/IP), Compact Flash-II (WLAN) • Supported Transponder: I-Code1, ISO15693, 18000-3-A, e.g. I-Code SLI, my-d, STM LRI512/64, Tag-it HFI • Indicators: 6 LED for diagnosis of the operation status • Temperature Range: Operating: -20°C ~ 55°C; Storage: -25°C ~ 85°C

629-1003-ND (FEIG ELECTRONICS # 1260.021.00.00) Module, No Housing..... **$3895.52**

629-1004-ND (FEIG ELECTRONICS # 1260.022.00.00) Module, No Housing, RS-232/485 Only..... **$3449.94**

629-1002-ND (FEIG ELECTRONICS # 1260.020.00.00) In Housing..... **$4027.32**

Antennas

ID ISC.ANT300/300

ID ISC.ANT300/300 is a single-loop antenna with pre-set adjustment electronics and has been optimized as a transmitting and reception antenna for reader ID ISC.LR2000. At a calibrated transmitting power of 4W a reading range of up to 55cm is possible. Furthermore, it can be used with other readers having a transmitter frequency of 13.56MHz and an output impedance of 50Ω.

The antenna is suitable for both object and personal identification. The preferred direction of a smart label is parallel to the antenna's surface. The right position to obtain a maximum range would be above the centre of the antenna's surface.

Specifications:

• Housing: Plastic ABS • Dimensions (W x H x L): 322mm x 337mm x 40mm ±1mm • Weight: Approximately 0.7kg • Protection Class: IP 65 • Color: Black • Maximum Transmitting Power: 8W • Operating Frequency: 13.56MHz • Working Range: Maximum 55cm • Antenna Connection: 1 x SMA Plug (50Ω) • Antenna Connection Cable: RG58, 50Ω, Approximately length of 3.6m • Temperature Range: Operating: -25°C ~ 55°C; Storage: -25°C ~ 60°C

629-1007-ND (FEIG ELECTRONICS # 1451.000.00.01)..... **$694.36**

ID ISC.ANT800/600-DA

As a single loop antenna with tuning circuitry with a transmitting power of maximum 4W (Europe), a maximum reading range of 80cm is possible. Gate configurations of 2, 4 or 6 antennas ID ISC.ANT800/600-DA enable even 200cm, using a parallel transponder orientation. The antenna consists of the electrical antenna conductor, housing and the tuning circuitry ID ISC.DAT (Tuner) and is factory tuned on a wood base to an impedance of 50Ω. After installing in changed ambient conditions, the antenna can be tuned using the corresponding commands.

Specifications:

• Housing: Plastic ABS • Dimensions (W x H x D): 852mm x 620mm x 40mm +/-1mm • Color: Black • Weight Approximately 2.5kg • Protection Class: IP 65 • Safety: USA, UL 1950 • Maximum Transmitting Power: 8W • Maximum Permitted Transmitting Power: EU (EN 300 330): 4W; USA (FCC Part 15): 0.25W • Operating Frequency: 13.56MHz • Reading Range: 80cm • Antenna Connection: SMA plug (50Ω) • Antenna Connection Cable: RG 58, 50Ω, 3.6m • Temperature Range: Operating: -25°C ~ 55°C; Storage: -25°C ~ 60°C

629-1008-ND (FEIG ELECTRONICS # 1451.008.00.00)..... **$2334.29**

ID ISC.ANT.U250/250-FCC

The UHF antenna ID ISC.ANT.U250/250-FCC are circular polarized antenna for operating frequencies in the UHF range 902-928MHz (FCC antenna). Transponders can be identified in two different orientations (E plane / H plane).

Specifications:

• Housing: Plastic • Dimensions (W x H x D): 260mm x 260mm x 56mm • Weight: Approximately 1050g • Color: White (similar RAL9018) • Protection Class: IP 54 • Operating Frequency: FCC antenna, 902-928MHz • Gain: FCC antenna, 8.7dBic @ 915MHz • 3dB Beam Width: E plain: 65°; H plain: 65° • Polarization: Circular • VSWR: <1.5:1 • Antenna Connection: SMA socket (50Ω) • Temperature Range: Operating: -25°C ~ 55°C; Storage: -25°C ~ 85°C

629-1009-ND (FEIG ELECTRONICS # 1451.009.02.00)..... **$369.04**

ID ISC.ANT340/240

OBID i-scan mid range antennas are operated in combination with mid range reader ID ISC.MR100-x. Depending on the application, pad or industrial antennas may be used. The elegant Pad Antenna ID ISC.ANT340/240 is perfectly suitable for desk applications with a reading range of up to 30cm. File and document tracking as well as the registration of rental goods during distribution and return are only two out of many possible applications. For applications in rough industrial environments with a required range of up to 40cm, we recommend antenna type ID ISC.ANT300/300.

Specifications:

• Housing: Plastic ABS • Color: Grey-white • Dimensions (W x H x D): 337mm x 237mm x 8.3mm • Weight: 530g • Protection Class: IP 40 • Admissible Transmitting Power: 1W • Reading Distance: Up to 30cm • Antenna Connection: SMA - plug (50Ω) • Antenna Cable: RG174 (2.0m) • Operating Frequency: 13.56MHz • Temperature Range: Operating: 0°C ~ 55°C; Storage: -25°C ~ 85°C

629-1025-ND (FEIG ELECTRONICS # 1663.000.00.00)..... **$263.15**

ID ISC.ANT200/200

ID ISC.ANTH200/200 is a hand held single loop antenna and has been optimized as a sending and receiver antenna for the i-scan midrange readers with external antenna connection. Using the transmitting power of the reader of 2W (Maximum transmission power of the antenna) and a label (45 x 76 mm^2 in size; label sensitivity 75 mA/m) a read range of 30-40cm is possible with the label oriented parallel to the antenna. Operation with other readers having a transmission frequency of 13.56 MHz and 50Ω output impedance is also possible. The antenna is factory tuned to an impedance of 50Ω. Operation in metallic surroundings is also possible. The antenna can be used for either product of person detection.

Specifications:

• Housing: ABS/UL 94 HB •Dimensions (W x H x D): 460 x 200 x 25 mm^3 • Weight: Approximately 0.35kg • Protection Class: IP 20 • Temperature Range: Operation: 0 °C ~ 55 °C Storage: -25°C ~ 85°C • Relative Air Humidity: 95% (non-condensing) • Operating Frequency: 13.56MHz • Connecting Cable: RG58; 50Ω; 3.6m • Connection: SMA-Plug (50Ω) • Maximum Transmitting Power: 2W • Generic Emissions Standard (EMC): EN 61000-6-3:2001 • Electromagnetic Compatibility (EMC): EN 6100-6-2:2001

629-1056-ND (FEIG ELECTRONICS # 2717.000.00)..... **$700.30**

ID ISC.ANT100/100-A

ID ISC.ANT100/100-A • External 50Ω antenna for ID ISC.M02 • Dimensions: 100mm x 100mm • Cable: Coax cable approximately 50cm in length

629-1039-ND (FEIG ELECTRONICS # 1968.000.00.00)..... **$101.47**

ID ISC.ANT40/30-A

ID ISC.ANT40/30-A • External 50Ω antenna for ID ISC.M02 • Dimensions: 40mm x 30mm • Cable: Coax cable approximately 50cm in length

629-1038-ND (FEIG ELECTRONICS # 1967.000.00.00)..... **$70.41**